

## AMENDMENT

### In the Specification:

**Please replace the paragraph, beginning on page 27, line 5, with the following rewritten paragraph:**

--The kinase domain of human JAK1 was amplified from U937mRNA using the polymerase chain reaction with the following primers:

XHOI-J1      5'-CCG CTC GAG ACT GAA GTG GAC CCC ACA CAT-3'

(SEQ ID NO:1)

J1-KPNI      5'-CGG GGT ACC TTA TTT TAA AAG TGC TTC AAA-3'

(SEQ ID NO:2)--

**Please replace the paragraph, beginning on page 27, line 14, with the following rewritten paragraph:**

--The kinase domain of human JAK2 was amplified from U937mRNA using the polymerase chain reaction with the following primers:

SALI-jk2      5'-ACG CGT CGA CGG TGC CTT TGA AGA CCG GGA T-3'

(SEQ ID NO:3)

jk2-NOTI      5'-ATA GTT TAG CGG CCG CTC AGA ATG AAG GTC ATT T-3'

(SEQ ID NO:4)--

**Please replace the paragraph, beginning on page 27, line 23, and bridging to page 28, with the following rewritten paragraph:**

--The kinase domain of human JAK3 was amplified from U937mRNA using the polymerase chain reaction with the following primers:

XHOI-J3 5'-CCG CTC GAG TAT GCC TGC CAA GAC CCC ACG-3'

(SEQ ID NO:5)

J3-KPNI 5'-CGG GGT ACC CTA TGA AAA GGA CAG GGA GTG-3'

(SEQ ID NO:6)--

**Please replace the paragraph, beginning on page 28, line 8, with the following rewritten paragraph:**

--The kinase domain of human TYK2 was amplified from A549 mRNA using the polymerase chain reaction with the following primers:

HT2EK 5'-GGA GCA CTC GAG ATG GTA GCA CAC AAC CAG GTG-3'

(SEQ ID NO:7)

ITY2.2R 5'-GGA GCA GGA ATT CCG GCG CTG CCG GTC AAA TCT GG-3'

(SEQ ID NO:8)--

**Please replace the paragraph, beginning on page 28, line 21, and bridging to page 29, with the following rewritten paragraph:**

--Kinase assays were performed in a 96 well capture-based ELISA assay or in 384 well Optiplates (Packard) using an Alphascreen Protein Tyrosine Kinase kit. In either ~~ease~~ case using approximately 1.5 µg of affinity purified PTK domain in the presence of 50mM HEPES, pH 7.5, 10mM MgCl<sub>2</sub>, 150mM NaCl and 10µM-1mM ATP. The biotinylated substrate biotin-EGPWLEEEEEAYGWMDNF-NH<sub>2</sub> (SEQ ID NO:9) (final concentration 5µM) was used as substrate. In the ELISA assay tyrosine phosphorylation was quantitated following transfer to an avidin coated ELISA plate using peroxidase-linked anti-phosphotyrosine antibody PY20. In the Alphascreen assay, Alphascreen phosphotyrosine acceptor beads followed by streptavidin donor beads were added under subdued light. The ELISA plates were read on a BMG Fluorostar, the Alphascreen plates were read on a Packard Fusion

*Alpha.* Inhibitors were added to the assays fifteen minutes prior to the addition of ATP.

Inhibitors were added in aqueous DMSA, with DMSA concentrations never exceeding 1%.--